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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/627,162

07/25/2003

Stephan Kirchmeyer

CH-7855/STA-211

2513

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7590

12/08/2006

BAYER MATERIAL SCIENCE LLC

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PITTSBURGH, PA 15205

EXAMINER

RONESI, VICKEY M

ART UNIT

PAPER NUMBER

1714

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,162

Applicant(s)

KIRCHMEYER ET AL.

Examiner

Vickey Ronesi

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/14/2006 has been entered.
2. All outstanding objections and rejections are withdrawn in light of applicant's amendment filed on 9/14/2006.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.
4. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonas et al (US 5,300,575 cited on IDS dated 01/26/2004) in view of Moehwald (US 4,728,399).

Jonas et al discloses a polymerization of 3,4-dialkoxythiophenes wherein 3,4-dialkoxythiophene (col. 2, lines 12-44), a polyacid (i.e., polyanion) (col. 2, lines 45-52), an oxidizing agent (col. 3, lines 11-15; col. 3, line 47 to col. 4, line 21), and strong inorganic acids (in cases where the polyacid is weakly acidic which intrinsically lowers the pH of the reaction mixture) (col. 4, lines 22-26) are dispersed in water (col. 3, lines 19-25).

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Jonas et al does not disclose the use the presently claimed peroxodisulfuric acid as an oxidizing agent in its composition; however, it does disclose that oxidizing agents that are typically used in oxidative polymerization of pyrrole are used in polymerizing dialkoxythiophene (col. 3, lines 12-13).

Moehwald discloses an electrically conductive polymer that is formed by treating polymer-forming monomers such as pyrroles and thiophenes with an oxidizing agent (col. 2, lines 11-13). Oxidizing agents which have proven to be useful are peroxyacids such as peroxodisulfuric acid (col. 3, lines 3-5).

Since Moehwald discloses that peroxodisulfuric acid is a particularly useful oxidizing agent in pyrrole polymerizations and given that Jonas et al is open to any oxidizing agent that is used in the oxidative polymerization of pyrrole, it would have been obvious to one of ordinary skill in the art to use peroxodisulfuric acid as an oxidizing agent in Jonas et al and thereby intrinsically have a polymerization at a pH of 1.5 or less since peroxodisulfuric acid and/or other strong inorganic acids are used to lower the pH and increase the polymerization rate.

Response to Arguments

5. Applicant's arguments filed 9/14/2006 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that Jonas et al does not describe or suggest the specific oxidizing agent or the claimed pH and (B) that unexpected results with respect to light transmission and surface resistivity are obtained by the use of peroxodisulfuric acid

With respect to argument (A), first, the examiner agrees that Jonas et al does not disclose peroxodisulfuric acid as the oxidizing agent, however, that is precisely why Moehwald was

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utilized. Second, Jonas et al clearly discloses that it is advantageous to utilize strong acid to increase the polymerization rate (col. 4, lines 22-26). Therefore, it would have been well within the capabilities of one of ordinary skill in the art to utilize a sufficiently low pH, including the range presently claimed, to control the polymerization rate. Furthermore, applicant discloses on page 7, lines 11-18 that by using perosodisulfuric acid, a desired pH of less than 1.5 is obtained.

With respect to argument (B), applicant's assertion of unexpected results has been considered, however, there is insufficient evidence to support such a claim. First, proper side-by-side examples have not been provided which can clearly establish unexpected results. In particular, Example 13 and Comparative Example 3 are not proper side-by-side examples since there is less peroxodisulfuric acid oxidizing agent in Example 13 than the sodium peroxodisulfate oxidizing agent in Comparative Example 3. Second, the inventive data and comparative data are not commensurate in scope with the instant claims. Case law holds that evidence is insufficient to rebut a *prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*, 713 F.2d 731, 741, 218 USPQ 769, 777 (Fed. Cir. 1983).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Ronesi whose telephone number is (571) 272-2701. The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/5/2006
Vickey Ronesi



Vasu Jagannathan
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